

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Bernhard FREI DOCKET NO.: P05,0201  
SERIAL NO.: 10/537,479 CONFIRMATION NO.: 3582  
FILED: October 20, 2005  
INVENTION: **METHOD AND DEVICE FOR THE REAL TIME CONTROL OF PRINT IMAGES**

**MAIL STOP PCT**

Commissioner for Patents,  
P. O. Box 1450  
Alexandria, Virginia 22313-1450

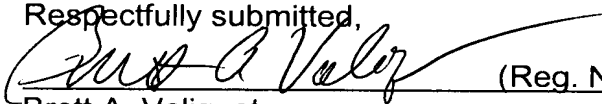
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**SUBMITTAL OF ENGLISH TRANSLATION OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

S I R:

Enclosed herewith is the English translation of the International Preliminary Examination Report for the above-identified application.

Respectfully submitted,

  
(Reg. No. 27,841)

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**CERTIFICATE OF MAILING**

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BRETT A. VALIQUET

From the INTERNATIONAL BUREAU

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rule 72.2)

To:

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Postfach 86 07 48  
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29. Nov. 2006

Erled. ....

Date of mailing (day/month/year) 23 November 2006 (23.11.2006)	
Applicant's or agent's file reference 2002ODT1202P	IMPORTANT NOTIFICATION
International application No. PCT/EP2003/014630	International filing date (day/month/year) 19 December 2003 (19.12.2003)
Applicant OCÉ DOCUMENT TECHNOLOGIES GMBH et al	

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

**2. Transmittal of the copy of the translation to the elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

None

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

EP, JP, US

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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Translation

PATENT COOPERATION TREATY

PCT/EP2003/014630



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2002ODT1202P	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/014630	International filing date (day/month/year) 19 December 2003 (19.12.2003)	Priority date (day/month/year) 20 December 2002 (20.12.2002)
International Patent Classification (IPC) or national classification and IPC B41F 33/00		
Applicant OCÉ DOCUMENT TECHNOLOGIES GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 7 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 15 July 2004 (15.07.2004)	Date of completion of this report 03 February 2005 (03.02.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/014630

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
 pages 1, 4-16, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages 2, 3, 3a, filed with the letter of 12 November 2004 (12.11.2004)
- ☒ the claims:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages 18, 20 // 17, 19, filed with the letter of 12.11.2004 // 25.11.2004
- ☒ the drawings:  
 pages 1/8-8/8, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/14630

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-13	YES
	Claims		NO
Inventive step (IS)	Claims	1-13	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-13	YES
	Claims		NO

### 2. Citations and explanations

Reference is made to the following documents:

D1: DE-A-199 40 879 (INNOMESS ELEKTRONIK GMBH)

8 March 2001 (2001-03-08)

D2: US-A-6 024 018 (NAGLER MIRIAM ET AL)

15 February 2000 (2000-02-15).

Document D1 is considered to be the closest prior art for the subject matter of claim 1. D1 discloses (the references in parentheses are to D1):

a method for monitoring, more particularly for real-time monitoring, of print images, comprising the following steps:

- electrooptical recording and digitization of an actual image into individual pixels (column 3, lines 20 to 38);
- use of a reference image which is segmented into a plurality of segments, a reference value for colour and structure being assigned to each segment (column 3, lines 39 to 45);

- comparison of the colour attributes of the pixels of the actual image with the corresponding reference values of the reference image, a corresponding pixel in a result image being labelled as an error when a deviation from a predetermined threshold value occurs (column 3, lines 41 to 47; column 2, lines 45 to 60).

The subject matter of claim 1 differs therefore from the known method in that

(a) only regions with identical colour attributes are used for the comparison of print and reference images;

(b) regions with identical colour attributes are defined by means of a segmentation algorithm, whereas in the method according to D1 the limits of the regions are fixed arbitrarily;

(c) the edge regions of the segments are not taken into account in the comparison.

In the method according to D1, on the other hand, meaningful assignment of a colour reference value to a segment is not always possible because of the arbitrary decomposition of the image into segments.

The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The problem addressed by the present invention can therefore be considered that of improving the selection of image regions for the comparison between print and reference images.

The solution to this problem as proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)) for the following reasons:

None of the documents cited in the search report discloses features which, in combination with the method disclosed in D1, would result in a method as per claim 1.

Although document D2 describes a method for monitoring print images in which the entire image is decomposed into zones, each of which is produced by a printing unit, D2 uses within these regions a method for selecting comparison regions which differs from that of the present invention in that, according to D2, the method is also applied to the edge regions of the segments.

Consequently, a combination of D1 and D2 does not lead to the method described in claim 1 either.

Claim 11 relates to a device analogous to the method as per claim 1 and therefore likewise meets the PCT requirements for novelty and inventive step.

Claims 2-10 and 12 and 13 are dependent on claims 1 and 11, respectively, and therefore likewise meet the PCT requirements for novelty and inventive step.

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